

ABSTRACT OF THE INVENTION

Disclosed are the following: a wide format thermal printer for printing a multicolor graphic product on a printing sheet; a vacuum workbed for supporting a sheet material for performing work operations, such as cutting, printing or plotting, thereon; a replaceable donor sheet assembly, which includes a memory, for use with a thermal printer; methods and apparatus for improved thermal printing, including methods and apparatus for conserving donor sheet and reducing the amount of time required to print a multicolor graphic product; a thermal printhead including a memory; and methods and apparatus for the alignment of a sheet material for printing or performing other work operations on the sheet material. The wide format thermal printer can include provision for the automatic loading of cassettes of donor sheet from a cassette storage rack. The vacuum workbed can include provision for determining the size of the sheet material supported by the workbed, and for controlling the suction applied to the apertures in a worksurface of the workbed. Also disclosed are methods and apparatus for controlling the tension of the donor sheet during printing with a wide format thermal printer.

10034029-122701